

**REMARKS/ARGUMENTS**

If the Examiner believes that there are any unresolved issues in any of the claims now pending in the application, the Examiner is urged to telephone George Wolken, Jr., Esq. at (408) 567-0340 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Claim Amendments

In the Final Office Action, the Examiner objected to the clarity of expression of claims 1, 2, 4-8, 10, 11, 22 and 23, suggesting the insertion of "and is" into these claims. Independent claims 1, 7, 22 and 23 have been so amended and, through claim dependency, likewise amend dependent claims 2, 4-6, 8, 10 and 11.

Also, independent claims 1, 7, 22 and 23, have been amended such that the expression "...if present, removing excess.." has been replaced with "...removing any non-absorbed excess.." This is intended to add to the clarity of expression with respect to the term "excess." Paragraph [0034] of the as-filed application (Paragraph [0036] of the published application 2005/0100712, abbreviated '712 ) indicates that the Applicants are using "excess" to indicate non-absorbed quantities of polymerizable materials, if any, that are present on the surface of a workpiece to be bonded. Fig. 1 and Fig. 2 indicate the removal of non-absorbed excess polymerizable material, understanding thereby that some polymerizable materials may fully absorb into some workpieces such that a

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separate drying step is not needed, as discussed in [0034],  
for example([0036] of '712).

Applicants further refer to paragraphs [0013] and  
[0014] of the as-filed application ([0015], [0016] of '712).

[0013] "Polymerization welding is a dry bonding process..."

Paragraph [0014] provides one example of a functional  
characteristic of some "dry bonding" processes as follows:

[0014] As a dry bonding process, polymerization  
welding allows the workpieces to be repositioned and  
realigned numerous times before initiating the  
polymerization reaction (typically by heating). Thus,  
unlike many other adhesive bonding techniques,  
polymerization welding allows the workpieces to be  
brought into contact and readily repositioned to the  
precise desired locations, unimpeded by adhesive on  
the surfaces.

That is, prior art bonding processes lacking  
repositionability or realignability are not "dry bonding"  
which is a useful (but not exclusive) technique for  
distinguishing elements of the prior art.

Applicants respectfully submit that the above  
amendments to claims distinguish the prior art such that all  
claims pending in this application are allowable.

New claim 24 relates to bonding of porous polymer  
workpieces by polymerization welding. Applicants  
respectfully submit that the dry bonding process of the  
claim is patentably distinct from the prior art.

Rejections under 35 U.S.C. § 102

In the Final Office Action, the Examiner rejected claims 1, 2, 7, 8, 22 and 23 under 35 U.S.C. § 102(b) as being anticipated by Unger et al (US Patent Application Publication 2001/0054778; published Dec. 27, 2001; hereinafter "Unger"). In light of the current amendments to claims 1, 7, 22 and 23, and to claims dependent therefrom, and/or the following arguments, this rejection is respectfully traversed.

Applicants call attention to MPEP § 2143.04 which states in part:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art...."All words in a claim must be considered in judging the patentability of that claim against the prior art."... When evaluating claims for obviousness under 35 U.S.C. 103, all the limitations of the claims must be considered and given weight..." (citations omitted and emphasis supplied).

While MPEP § 2143.03 strictly relates to obviousness determinations under 35 U.S.C § 103, Applicants respectfully submit that no lesser standard applies to a determination of anticipation under 35 U.S.C. § 102. Applicants further submit that at least one element of claims 1, 2, 7, 8, 22 and 23, as currently amended, is not taught or suggested by Unger, in particular the claim element of utilizing combinations of a polymerizable material and/or a workpiece that lead to a dry bonding process, or removing non-absorbed excess polymerizable material to produce a dry bonding process.

Our discussion of Unger presented in our Amendment filed February 16, 2007 is referred to and incorporated herein by reference. Applicants respectfully point out that Unger nowhere refers to a dry bonding process nor provides steps to dry the surfaces should added materials not fully absorb into the workpiece. The "realignability test" described above is also failed by various embodiments disclosed by Unger, thus providing further evidence of the absence of a dry bonding process.

The Examiner considered Applicants' previously presented arguments concerning the absence or removal of excess polymerizable material as a claim element not taught or suggested or inherent in the prior art, but found the arguments unpersuasive. The Examiner argued that an interpretation of "excess" as used in the claims of our application prior to the current amendments would include methods taught by Unger in that "excess" need not be a dry bonding process. While not conceding the correctness of this interpretation, Applicants respectfully submit that the amended claims now pending in this application more clearly express the intent of the Applicants that non-absorbed excess polymerizable material is removed from the surface by a separate processing step in those cases in which it is not fully absorbed without intervention. Applicants respectfully submit that this clarification distinguishes the prior art and renders independent claims 1, 7, 22 and 23 patentable.

MPEP § 2143.03 states in part "...If an independent claim is nonobvious under 35 U.S.C 103, then any claim depending therefrom is nonobvious (citations omitted)." Applicants respectfully submit that the same reasoning applies such that novelty of an independent claim under 35 U.S.C § 102 leads to a conclusion of novelty for all claims depending therefrom. Thus, novelty of claims 1, 7, 22 and 23 as demonstrated above leads to the novelty of all claims depending therefrom, thus rendering claims 1, 2, 4-8, 10, 11, 22 and 23 allowable.

The Examiner has rejected claims 1, 2, 7, 8, 22 and 23 under 35 U.S.C. § 102(b) as being anticipated by Soane et al (US Patent 6,176,962; issued Jan. 23, 2001; hereinafter "Soane"). In light of the current amendments to claims 1, 7, 22 and 23, and to claims dependent therefrom and/or the following arguments, this rejection is respectfully traversed.

Our discussion of Soane presented in our Amendment filed February 16, 2007 is referred to and incorporated herein by reference. Applicants respectfully point out that Soane nowhere refers to a dry bonding process nor provides steps to dry the surface should added materials not fully absorb into the workpiece. The "realignability test" described above is also failed by various embodiments disclosed by Soane, thus providing further evidence of the absence of a dry bonding process.

The Examiner considered Applicants' previously presented arguments concerning the absence or removal of excess polymerizable material as a claim element not taught

or suggested or inherent in the prior art, but found the arguments unpersuasive. The Examiner argued that an interpretation of "excess" as used in the claims of our application prior to the present amendments would include methods taught by Soane in that "excess" need not be a dry bonding process. While not conceding the correctness of this interpretation, Applicants respectfully submit that the amended claims now pending in this application more clearly express the intent of the Applicants that non-absorbed excess polymerizable material is removed from the surface in a separate processing step in those cases in which it is not fully absorbed without such intervention. Applicants respectfully submit that this clarification distinguishes the prior art and renders independent claims 1, 7, 22 and 23 patentable.

Applicants call attention to MPEP § 2143.04 which states in part:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.... "All words in a claim must be considered in judging the patentability of that claim against the prior art."... When evaluating claims for obviousness under 35 U.S.C. 103, all the limitations of the claims must be considered and given weight..." (citations omitted and emphasis supplied).

While MPEP § 2143.03 strictly relates to obviousness determinations under 35 U.S.C. § 103, Applicants respectfully submit that no lesser standard applies to a determination of anticipation under 35 U.S.C. § 102. Applicants further submit that at least one element of claims 1, 7, 22 and 23 is not taught or suggested by Soane, in particular the claim

element of utilizing combinations of a polymerizable material and/or a workpiece that lead to a dry bonding process, or removing non-absorbed excess polymerizable material to produce a dry bonding process.

MPEP § 2143.03 states in part "...If an independent claim is nonobvious under 35 U.S.C 103, then any claim depending therefrom is nonobvious (citations omitted)." Applicants respectfully submit that the same reasoning applies such that novelty of an independent claim under 35 U.S.C § 102 leads to a conclusion of novelty for all claims depending therefrom. Thus, novelty of claims 1, 7, 22 and 23 as demonstrated above leads to the novelty of all claims depending therefrom, including claim 2.

Rejections under 35 U.S.C. § 103

The Examiner has rejected claims 4-6, 10 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Soane et al (US Patent 6,176,962; issued Jan. 23, 2001; hereinafter "Soane") as applied to claims 1, 2, 7, 8, 22 and 23 above and further in view of Kawazoe et al (WO 03/070623, published Aug. 28, 2003, "Kawazoe"), and/or Stokich et al (U.S. Patent 6,184,284 issued Feb. 6, 2001, "Stokich"), and/or White et al (U.S. Patent 4,824,500 issued Apr. 25, 1989, "White").

Applicants respectfully traverse this rejection on the grounds that none of the cited references teach or suggest, singly or in combination, the bonding of workpiece surfaces by the dry process, polymerization welding of the present invention; that is, workpiece bonding arising from

one or more polymerizable materials in one or more surface diffusion zones and in the absence of excess polymerizable material on the surface to be bonded. The detailed discussion is presented in the above section in connection with a more thorough elucidation of the distinctions with the Soane reference and is not repeated here. Applicants respectfully submit that none of the cited references supply this missing claim element, singly or in combination, so pursuant to the "all elements rule" of MPEP § 2143.03, the present claims are patentable.

The Examiner has rejected claims 4-6, 10 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Unger et al (US Patent Application Publication 2001/0054778; published Dec. 27, 2001; hereinafter "Unger") as applied to claims 1-3 and 7-9 above and further in view of Kawazoe et al (WO 03/070623, published Aug. 28, 2003, "Kawazoe"), and/or Stokich et al (U.S. Patent 6,184,284 issued Feb. 6, 2001, "Stokich"), and/or White et al (U.S. Patent 4,824,500 issued Apr. 25, 1989, "White").

Applicants respectfully traverse this rejection on the grounds that none of the cited references teach or suggest, singly or in combination, the bonding of workpiece surfaces by the dry bonding, polymerization welding of the present invention; that is, workpiece bonding arising from one or more polymerizable materials in one or more surface diffusion zones and in the absence of excess polymerizable material on the surface to be bonded. The detailed discussion is presented in the above section in connection with a more thorough elucidation of the distinctions with the Unger reference and is not repeated here. Applicants



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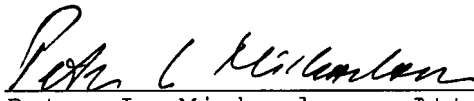
respectfully submit that none of the cited references supply this missing claim element, singly or in combination, so pursuant to the "all elements rule" of MPEP § 2143.03, the present claims are patentable.

#### Conclusion

In view of the above amendments and arguments, the Applicants respectfully submit all claims currently pending in this application, claims 1, 2, 4-8, 10, 11, 22-24, are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

Respectfully submitted,

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#### CERTIFICATE OF MAILING under 37 C.F.R. 1.8(a)

I hereby certify that this correspondence is being deposited on **August 16, 2007** with the United States Postal Service, with sufficient postage, in an envelope addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
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30,090  
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